

COOPER LIGHTING - METALUX®

DESCRIPTION

Cooper Lighting introduces accord II(TM), a new recessed T5 or T8 fixture. The accord II(TM) redefines fluorescent lighting by providing aesthetics, comfort and energy savings. The accord II(TM) provides increased comfort levels while providing significant energy savings.

The accord II(TM) is the ideal solution for offices, schools, hospitals, retail and other applications.

| Catalog # | Type |
|-------------|------|
| Project | |
| Comments | Date |
| Prepared by | |

SPECIFICATION FEATURES

A ... Construction

Shallow 3-3/4" deep housing is die formed of code gauge, prime cold rolled steel. Integral end plates are securely attached for strength and rigidity and the elimination of gaps. Four auxiliary fixture end suspension points are provided. KO's for continuous row wiring. Large access plate for supply connection.

B ... Electrical*

Ballasts are Class "P" and are positively secured. Rotor-lock lampholders ensure positive lamp retention. UL/CUL listed. Suitable for damp locations.

C ... Ballast Access

Ballast can be removed from below without tools.

D ... Finish

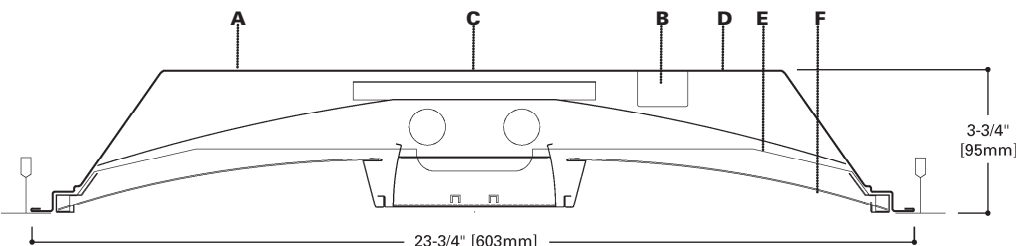
Durable cold rolled steel with multistage, iron phosphate pretreatment and white enamel finish to ensure maximum bonding and rust inhibition.

E ... Reflectors

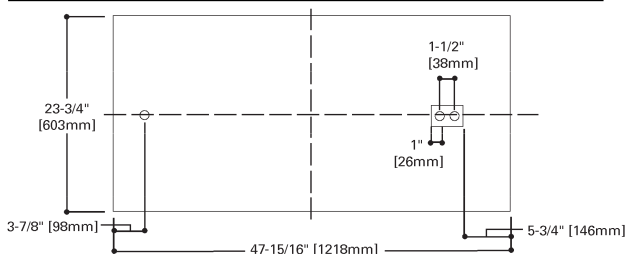
Reflector has high reflectance baked white enamel finish for luminous uniformity.

F ... Shielding

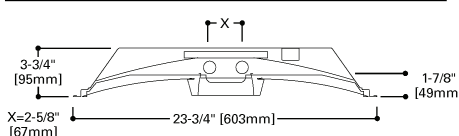
Positively retained frosted acrylic lenses and baffle provide a soft but effective distribution of light. Spring loaded latch and T-hinge doorframe for ease of installation and maintenance.



MOUNTING DATA



LAMP CONFIGURATIONS



DOOR FRAMES



CEILING COMPATIBILITY

G
Grid/Lay-in
Standard



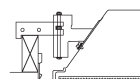
G
Concealed T



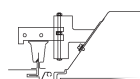
G
Slot Grid



F
Flange Trim
With Supporting
Swing Gates



C
Modular Trim
With Supporting
Swing Gates



**Ceiling
Type**

Exposed Grid
Concealed T
Slot Grid
Flange
Metal Pan

**Trim
Type**

G
G
G
F
C

(Verify compatibility/ consult factory.)

2AC2
228T5
254T5
232T8

T5 OR T8 LAMPS
2' X 4' Recessed
Troffer Series

*accord II*TM
T5/T8 Enhanced Lighting Series

ENERGY DATA

Input Watts:

EB Ballast & STD Lamps @ 277V
228T5 (58)
232 (58)
254T5 (106)

Luminaire Efficacy Rating

LER =FL67

Catalog Number: 2AC2-228T5-PBW

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.59

*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

**Consult Pre Sales Technical Support.

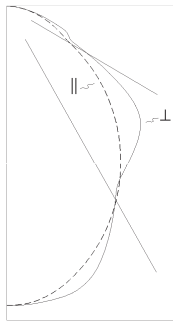
***See Drywall Frame Kit Accessory

LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT
Safe and convenient means of disconnecting power



PHOTOMETRICS



2AC2-228T5-BP
Electronic Ballast
(2) F28T5 Lamps
2900 Lumens each
Spacing criterion:
(II) 1.1 x mounting
height, (L) 1.1 x
mounting height
Efficiency 66.8%
Test Report:
2AC2-228T5PBW.IES
LER = FL67
Yearly Cost of 1000
lumens, 3000 hrs at
.08 KWH = \$3.59

Candlepower

| Angle | Along II | 45° | Across L |
|-------|----------|------|----------|
| 0 | 1712 | 1712 | 1712 |
| 5 | 1699 | 1705 | 1710 |
| 10 | 1651 | 1675 | 1697 |
| 15 | 1573 | 1623 | 1662 |
| 20 | 1481 | 1542 | 1562 |
| 25 | 1377 | 1425 | 1409 |
| 30 | 1262 | 1274 | 1250 |
| 35 | 1137 | 1112 | 1162 |
| 40 | 1005 | 955 | 1112 |
| 45 | 867 | 845 | 1065 |
| 50 | 724 | 746 | 996 |
| 55 | 572 | 639 | 818 |
| 60 | 419 | 511 | 523 |
| 65 | 327 | 358 | 391 |
| 70 | 252 | 252 | 304 |
| 75 | 182 | 178 | 201 |
| 80 | 115 | 110 | 117 |
| 85 | 52 | 49 | 52 |
| 90 | 0 | 0 | 0 |

Coefficients of Utilization

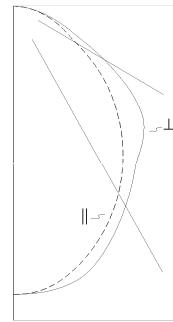
| Effective floor cavity reflectance | | | | | | | | | | | | | | | | 20% | | | 30% | | | 10% | | | 0% |
|------------------------------------|-----|----|----|----|-----|----|----|----|-----|----|----|----|-----|----|----|-----|-----|----|-----|--|----|-----|--|--|----|
| rc | 80% | | | | 70% | | | | 50% | | | | 30% | | | | 10% | | | | 0% | | | | |
| rw | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 79 | 79 | 79 | 79 | 78 | 78 | 78 | 78 | 74 | 74 | 74 | 71 | 71 | 71 | 68 | 68 | 68 | 67 | | | | | | | |
| 1 | 73 | 70 | 68 | 65 | 71 | 69 | 66 | 64 | 66 | 64 | 62 | 63 | 62 | 60 | 61 | 60 | 59 | 57 | | | | | | | |
| 2 | 67 | 62 | 58 | 54 | 65 | 61 | 57 | 54 | 58 | 55 | 52 | 56 | 54 | 51 | 54 | 52 | 50 | 49 | | | | | | | |
| 3 | 62 | 55 | 50 | 46 | 60 | 54 | 49 | 45 | 52 | 48 | 45 | 50 | 47 | 44 | 49 | 46 | 43 | 42 | | | | | | | |
| 4 | 57 | 49 | 44 | 39 | 55 | 48 | 43 | 39 | 47 | 42 | 39 | 45 | 41 | 38 | 44 | 40 | 38 | 36 | | | | | | | |
| 5 | 52 | 44 | 38 | 34 | 51 | 43 | 38 | 34 | 42 | 37 | 34 | 41 | 37 | 33 | 40 | 36 | 33 | 32 | | | | | | | |
| 6 | 49 | 40 | 34 | 30 | 47 | 39 | 34 | 30 | 38 | 33 | 30 | 37 | 33 | 30 | 36 | 32 | 29 | 28 | | | | | | | |
| 7 | 45 | 36 | 31 | 27 | 44 | 36 | 31 | 27 | 35 | 30 | 27 | 34 | 30 | 26 | 33 | 29 | 26 | 25 | | | | | | | |
| 8 | 42 | 33 | 28 | 24 | 41 | 33 | 28 | 24 | 32 | 27 | 24 | 31 | 27 | 24 | 31 | 27 | 24 | 22 | | | | | | | |
| 9 | 39 | 31 | 25 | 22 | 38 | 30 | 25 | 22 | 30 | 25 | 22 | 29 | 25 | 22 | 28 | 24 | 22 | 20 | | | | | | | |
| 10 | 37 | 28 | 23 | 20 | 36 | 28 | 23 | 20 | 28 | 23 | 20 | 27 | 23 | 20 | 26 | 22 | 20 | 19 | | | | | | | |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 1267 | 21.8 | 32.7 |
| 0-40 | 1978 | 34.1 | 51.1 |
| 0-60 | 3270 | 56.4 | 84.4 |
| 0-90 | 3873 | 66.8 | 100.0 |
| 0-180 | 3873 | 66.8 | 100.0 |

Luminance Data

| Angle in Deg | Average 0-Deg cd/sm | Average 45-Deg cd/sm | Average 90-Deg cd/sm |
|--------------|---------------------|----------------------|----------------------|
| 45 | 1666 | 1624 | 2047 |
| 55 | 1355 | 1514 | 1938 |
| 65 | 1052 | 1151 | 1257 |
| 75 | 956 | 935 | 1056 |
| 85 | 811 | 764 | 811 |



2AC2-232-BI
Electronic Ballast
(2) F32T8 Lamps
3000 Lumens each
Spacing criterion:
(II) 1.1 x mounting
height, (L) 1.2 x
mounting height
Efficiency 63.6%
Test Report:
2AC2-232PBW.IES
LER = FL58
Yearly Cost of 1000
lumens, 3000 hrs at
.08 KWH = \$4.15

Candlepower

| Angle | Along II | 45° | Across L |
|-------|----------|------|----------|
| 0 | 1650 | 1650 | 1650 |
| 5 | 1637 | 1643 | 1646 |
| 10 | 1590 | 1613 | 1631 |
| 15 | 1516 | 1558 | 1590 |
| 20 | 1426 | 1475 | 1506 |
| 25 | 1325 | 1366 | 1404 |
| 30 | 1215 | 1242 | 1300 |
| 35 | 1095 | 1113 | 1200 |
| 40 | 970 | 986 | 1116 |
| 45 | 838 | 861 | 1055 |
| 50 | 703 | 745 | 966 |
| 55 | 558 | 634 | 799 |
| 60 | 412 | 503 | 592 |
| 65 | 322 | 357 | 404 |
| 70 | 249 | 249 | 292 |
| 75 | 179 | 176 | 199 |
| 80 | 113 | 110 | 118 |
| 85 | 50 | 48 | 51 |
| 90 | 0 | 0 | 0 |

Coefficients of Utilization

| Effective floor cavity reflectance | | | | | | | | | | | | | | | | 20% | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|-----|----|----|----|----|----|-----|----|----|----|----|----|-----|----|----|-----|----|----|-----|----|----|----|----|----|-----|----|----|----|----|----|----|----|---|--|--|--|
| rc | 80% | | | | | | 70% | | | | | | 50% | | | | | | 30% | | | | | | 10% | | | | | | 0% | | | | | |
| rw | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 0 | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 76 | 76 | 76 | 76 | 76 | 74 | 74 | 74 | 74 | 71 | 71 | 71 | 68 | 68 | 68 | 65 | 65 | 65 | 64 | | | | | | | | | | | | | | | | | |
| 1 | 70 | 67 | 64 | 62 | 68 | 65 | 63 | 61 | 63 | 61 | 59 | 60 | 59 | 57 | 58 | 57 | 56 | 54 | | | | | | | | | | | | | | | | | | |
| 2 | 64 | 59 | 55 | 52 | 62 | 58 | 54 | 51 | 56 | 52 | 50 | 54 | 51 | 49 | 52 | 49 | 48 | 46 | | | | | | | | | | | | | | | | | | |
| 3 | 59 | 52 | 47 | 43 | 57 | 51 | 47 | 43 | 49 | 46 | 42 | 48 | 44 | 42 | 46 | 43 | 41 | 40 | | | | | | | | | | | | | | | | | | |
| 4 | 54 | 47 | 41 | 37 | 52 | 46 | 41 | 37 | 44 | 40 | 37 | 43 | 39 | 36 | 41 | 38 | 36 | 34 | | | | | | | | | | | | | | | | | | |
| 5 | 50 | 42 | 36 | 32 | 48 | 41 | 36 | 32 | 40 | 35 | 32 | 39 | 35 | 32 | 38 | 34 | 31 | 30 | | | | | | | | | | | | | | | | | | |
| 6 | 46 | 38 | 32 | 29 | 45 | 37 | 32 | 28 | 36 | 32 | 28 | 35 | 31 | 28 | 34 | 31 | 28 | 26 | | | | | | | | | | | | | | | | | | |
| 7 | 43 | 35 | 29 | 25 | 42 | 34 | 29 | 25 | 33 | 28 | 25 | 32 | 28 | 25 | 31 | 28 | 25 | 24 | | | | | | | | | | | | | | | | | | |
| 8 | 40 | 32 | 26 | 23 | 39 | 31 | 26 | 23 | 30 | 26 | 23 | 30 | 25 | 22 | 29 | 25 | 22 | 21 | | | | | | | | | | | | | | | | | | |
| 9 | 37 | 29 | 24 | 21 | 37 | 29 | 24 | 21 | 28 | 24 | 21 | 27 | 23 | 20 | 27 | 23 | 20 | 19 | | | | | | | | | | | | | | | | | | |
| 10 | 35 | 27 | 22 | 19 | 34 | 27 | 22 | 19 | 26 | 22 | 19 | 25 | 21 | 19 | 25 | 21 | 19 | 17 | | | | | | | | | | | | | | | | | | |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 1224 | 20.4 | 32.1 |
| 0-40 | 1933 | 32.2 | 50.6 |
| 0-60 | 3212 | 53.5 | 84.1 |
| 0-90 | 3818 | 63.6 | 100.0 |
| 0-180 | 3818 | 63.6 | 100.0 |

Luminance Data

| Angle in Deg | Average 0-Deg cd/sm | Average 45-Deg cd/sm | Average 90-Deg cd/sm |
|--------------|---------------------|----------------------|----------------------|
| 45 | 1611 | 1655 | 2028 |
| 55 | 1322 | 1502 | 1893 |
| 65 | 1036 | 1148 | 1299 |
| 75 | 940 | 924 | 1045 |
| 85 | 780 | 749 | 795 |

ORDERING INFORMATION

SAMPLE NUMBER: 2AC2-228T5-UNV-EBT1-.90-U

| | | | | |
|---------------------------------------|--|--|---|---|
| Width 2 = 2' Width | Number of Lamps (Not included) 2 = 2 Lamp | Shielding BP=Frosted Lens & White Baffle BI=Frosted Lens & Semi-Specular Baffle | Ballast Type EB8 = T8 Electronic Instant Start. Total Harmonic Distortion < 20% No. of Ballast 1 or 2 EB8 / PLUS = T8 Electronic Instant Start. High Ballast Factor > 1.13. Total Harmonic Distortion < 20% No. of Ballast 1 or 2 ER8 = T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10% No. of Ballast 1 or 2 EBT = T5 Linear Electronic Program Rapid Start Total Harmonic Distortion < 10% No. of Ballast 1 or 2 Ballast Factor/Type (For 28W T5 Lamp Only) N=Normal Light Output .90 BF ⁽²⁾ H=High Light Output 1.15 BF ⁽²⁾ NDIM=Normal .9 BF Step Dimming ⁽³⁾ HDIM=High 1.15 BF Step Dimming ⁽³⁾ | Packaging U=Unit Pack PALC=Job Pack, in carton |
| Series AC2=Accord II Series | Wattage (Length) 28T5=28W T5 (48") 54T5=54W T5HO (48") 32=32W T8 (48") | Voltage⁽¹⁾ UNV=Universal Voltage 120-277 | Options GL=Single Element Fuse GM=Double Element Fuse Lamps=Lamps installed Flex=Flex Installed EL=Emergency Installed | |

NOTES: ⁽¹⁾ Products also available in non-US voltages and frequencies for international markets. ⁽²⁾ Step Dimming ballast available for 28WT5 lamps only. ⁽³⁾ .90 and 1.15 ballast factor available for 28WT5 lamps only.

For complete product data, reference the Fluorescent Specification binder. Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

SHIPPING INFORMATION

| Catalog No. | Wt. |
|-------------|---------|
| 2AC2-228T5 | 31 lbs. |
| 2AC2-254T5 | 31 lbs. |
| 2AC2-232 | 31 lbs. |